Amendments to the Claims

1. (currently amended) A method for planning stimulation of hyper/hypometabolic cortical areas, the method comprising:

simulating a field distribution for a stimulator relative to a position of the stimulator;

determining a stimulation area for the stimulator relative to a position of the stimulator;

determining functional anatomical patient data;

determining structural anatomical patient data;

navigationally registering the functional anatomical data with the structural anatomical data such that the functional anatomical data are available for navigation;

based on the functional anatomical data, detecting positions of the hyper/hypometabolic cortical areas in a patient's anatomy;

determining a position of a stimulator;

navigationally registering the stimulation area of the stimulator;

at least one of (i) registering or (ii) referencing the position of the hyper/hypometabolic cortical areas with respect to the position of the stimulator; ~~and~~

determining an optimal positioning for the stimulator on the basis of relative positional information of the hyper/hypometabolic cortical areas and the stimulation area of the stimulator; and

displaying the optimal positioning for the stimulator.

2. (original) The method as set forth in claim 1, wherein the detecting step is performed using a medical navigation system.

3. (original) The method as set forth in claim 1, wherein the stimulation is planned of hypermetabolic areas related to the manifestation of systemic tinnitus.

4. (cancelled)

5. (cancelled)

6. (previously presented) The method as set forth in claim 1, wherein the functional image detection method includes at least one of (i) functional magnetic resonance detection and (ii) positron emission tomography (PET).

7. (original) The method as set forth in claim 1, wherein the detecting step includes using a navigation system to optically detect arrangements of actively or passively emitting markers arranged on the patient's head and on the stimulation means.

8. (original) The method as set forth in claim 1, wherein the detecting step includes using a navigation system to magnetically or inductively detect (i) at least one of (a) positional coils and (b) oscillating circuits, arranged on the patient's head and on the stimulator.

9. (original) The method as set forth in claim 1, wherein the stimulator includes a cortical stimulation coil.

10. (original) The method as set forth in claim 2, further comprising:

outputting detected navigational data together with the determined optimal positioning on an image output.

11. (original) The method as set forth in claim 1, further comprising:

calibrating the stimulator.

12. (cancelled)

13. (cancelled)

14. (previously presented) A computer program storage medium comprising a program which, when it is run on a computer or is loaded onto a computer, causes the computer to perform a method in accordance with claim 1.

15. (currently amended) A method of stimulating hyper/hypometabolic cortical areas of a patient, the method comprising:

simulating a field distribution for a stimulation coil relative to a position of the stimulation coil;

determining a stimulation area for the stimulation coil relative to a position of the coil;

determining functional anatomical patient data;

determining structural anatomical patient data;

navigationally registering the functional anatomical data with the structural anatomical data such that the functional anatomical data are available for navigation;

based on the functional anatomical data, detecting positions of the hyper/hypometabolic cortical areas in a patient's anatomy;

detecting the position of the stimulation coil;

navigationally registering the stimulation area of the stimulation coil;

registering the position of the functional anatomical data with respect to the position of the stimulation coil; ~~and~~

positioning the stimulation coil on the basis of the relative positional information of the hyper/hypometabolic cortical areas and the stimulation area of the stimulation coil; and;

stimulating the hyper/hypometabolic cortical areas of the patient.